

PERFORMANCE ENHANCING BREAK-IN METHOD FOR A PEM FUEL CELL

Abstract of the Disclosure

5 A performance enhancing break-in method for a proton
exchange membrane ("PEM") fuel cell (12) includes cycling
potentials of an anode electrode (14) and a cathode
electrode (16) from a first potential to a second
potential and back to the first potential, and repeating
10 the cycling for each electrode (14, 16) for at least two
electrode cycles. The potential cycling may be achieved
in a first embodiment by applying a direct current from a
programmable direct current power source (80) to the
electrodes. Alternatively the potential cycling may be
15 achieved by varying reactants to which the anode and
cathode electrodes (14, 16) are exposed.